

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method, comprising:

graphically displaying at least one end condition;

receiving user input placing a target at a location;

receiving user input moving the location of the target;

determining a target type of the end condition;

and

dynamically solving the at least one end condition based on a-the current location of a-the target; and

dynamically modifying the display to reflect valid end conditions determine to when the end condition is valid..

2. (Original) The method of claim 1, further comprising graphically displaying valid end conditions.

Claims 3 and 4 (Canceled)

5. (Currently Amended) A method comprising:

receiving user input placing a target at a location;

determining targets for a plurality of end conditions;

displaying the targets to a user;
receiving user input selecting one of the targets;
receiving user input moving the location of the target;
-dynamically solving the plurality of end conditions based on the current location of the target; and
dynamically modifying the display to reflect valid end conditions.

6. (Currently Amended) The method of claim 5, further comprising:

providing a pointer;
~~receiving user input controlling a location of the pointer on the display;~~
~~receiving user input placing the target at location;~~ and
determining a valid solution to each of the plurality of the end conditions based on the targets and locations.

7. (Canceled)

8. (Previously presented) The method of claim 6, further comprising tracking the locations of the targets with the pointer.

9. (Previously presented) The method of claim 1, further comprising:
presenting a graphical user interface (GUI), the GUI including a graphics portion;
displaying a template and the at least one end conditions graphically in the graphics portion;

displaying available targets in the current template; and
displaying the invalid end conditions differently from valid end conditions.

10. (Currently Amended) A method, comprising:

receiving user input defining properties of an end condition;

receiving user input placing a target at a location;

receiving user input moving the location of the target;

dynamically solving the at least one end condition based on the current location of a target;
dynamically modifying the display to reflect valid end conditions determine to when the end
condition is valid; and

causing the end condition to be graphically displayed.

11. (Original) The method of claim 10, further comprising presenting a graphical user
interface to a user.

12. (Original) The method of claim 10, wherein the properties include at least one of a
priority, a target type, a target name, an offset, and benching information.

13. (Original) The method of claim 12, wherein the target type includes at least one of a
surface, a material, an elevation, a vertical plane, a horizontal plane, and a point.

14. (Original) The method of claim 13, wherein the horizontal plane is one of a feature and an alignment.
15. (Original) The method of claim 13, wherein the vertical plane is one of a feature and an alignment.
16. (Original) The method of claim 10, further comprising:
locating a point within a template that represents a beginning of the end condition;
solving the end conditions that begin at the point;
displaying the end condition that has a valid solution.
17. (Original) The method of claim 10, further comprising:
solving the end condition starting with a highest priority and proceeding to a lowest priority.
18. (Original) The method of claim 10, further comprising chaining a second end condition to the end condition.
19. (Original) The method of claim 18, further comprising:
determining a solution to the second end condition; and
validating the solution only when all end conditions in the chain have valid solutions.
20. (Currently Amended) A method, comprising:

presenting a graphical user interface (GUI), the GUI including a graphics portion;
displaying a template and ~~the a~~ plurality of end conditions graphically in the graphics
portion;
displaying available targets in the current template;
determining a target type of the end condition;
determining a location of the targets;
determining when the end condition is valid for the targets; and
displaying valid end conditions differently from not valid end conditions.